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(54) Title: DOUBLE-STRANDED RNA STRUCTURES AND CONSTRUCTS, AND METHODS FOR GENERATING AND USING THE SAME

~~Background:~~ The present invention relates to novel double-stranded RNA (dsRNA) structures and dsRNA expression constructs, generating them, and methods of utilizing them for silencing genes. Desirably, these methods specifically inhibit the expression of one or more target genes in a cell or animal (e.g., a mammal such as a human) without inducing toxicity. These methods can be used to prevent or treat a disease or infection by silencing a gene associated with the disease or infection. The invention also provides methods for identifying nucleic acid sequences that modulate a detectable phenotype, such as the function of a cell, the expression of a gene, or the biological activity of a target polypeptide.